

LEMUEL S. FITHIAN.

Clutch-Gearing.

117,758.

Patented August 8, 1871.

Fig 1

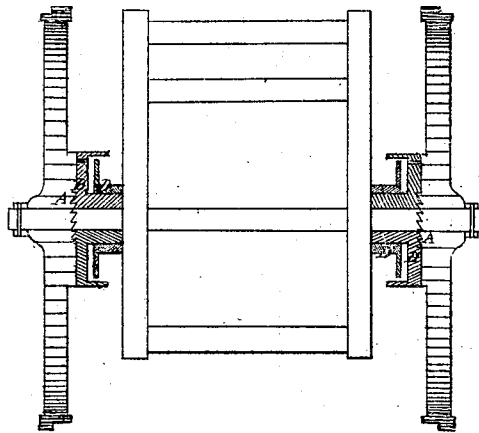


Fig 2

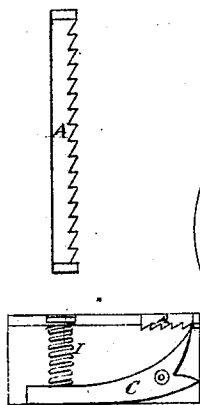


Fig 3

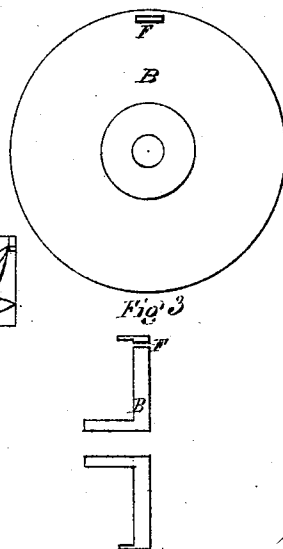
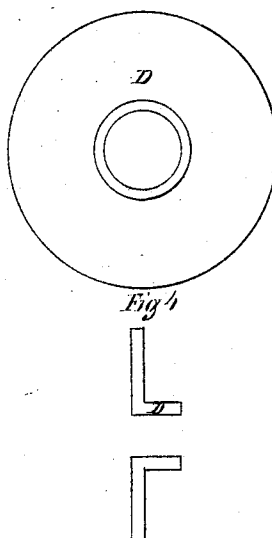


Fig 4



Witnesses
C. C. Wilson
J. H. Brown.
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Lemuel S. Fithian

UNITED STATES PATENT OFFICE.

LEMUEL SCUDDER FITHIAN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CLUTCH-GEARINGS.

Specification forming part of Letters Patent No. 117,758, dated August 8, 1871.

To all whom it may concern:

Be it known that I, LEMUEL SCUDDER FITHIAN, of Brooklyn, Kings county, State of New York, have invented certain Improvements in Clutch-Gearing, of which the following is the specification; and I do hereby declare that the following is a clear and full description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

Figure 1 is a sectional view of a harvesting-machine. Fig. 2 is the ratchet; Fig. 3, cupped, sleeved, and slotted disk. Fig. 4 is the sleeved disk. Fig. 5 is the dog and spring.

The nature of my invention consists of ratchet-wheels A A cogged on the sides of the face, the cogs being drawn on lines from the center, the ratchet being cast fast on the inner side of the driving-wheels. The hollow disks B B are keyed fast on the shaft and have slots F F, which carry the dogs C C working into the ratchet on wheels A A, and held in position by the springs I I. The disks D D work loosely on the sleeves of the disks B B, and have grooves cut in the outer sides of their own sleeves to allow the use of clutches in connection with levers or their equivalents. The loose disks D D are thrown in press against the dogs C C, thus throwing the points of the dogs out from the cogs on the ratchet-wheels A A onto the slot, and allowing the driving-wheels to revolve freely without setting the gearing in motion.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, the different parts being constructed as above and arranged upon the shaft as shown in cross-section view.

The ratchet-wheels A A are cast fast on the inner side of the driving-wheels, and have teeth cut on the side, the face of teeth being drawn in radial lines from the center of the shaft, the disks B B keyed fast on the shaft, and having the outer edges project over D D, forming a shell to keep out grass and dirt. The disks B B have slots F F, carrying the dogs C C, the points of the dogs being held in position against the ratchet-wheels A A by the springs I I, thus communicating motion from the driving-wheels to the shaft, and by this setting the gearing in motion. The disks D D work loosely on the sleeve of the disks B B, and have grooves cut in the outer sides of their own sleeves to allow the use of clutches, the clutches to be used in connection with levers or their equivalents. By the action of the clutches the disks D D are pushed against the inner ends of the dogs, thus drawing the points of the dogs within the slots and releasing their hold on the ratchet-wheels, allowing the driving-wheels to move freely without setting the gearing in motion.

What I claim by my invention, and desire to secure by Letters Patent, is—

The ratchet-disks A A A, made fast upon the carrying-wheels, in combination with the cupped, slotted, and sleeved disks B B B, (with dog C with spring and shoulder in slot,) and made fast upon the axle-tree, with sleeved disk D D D sliding upon the sleeve of B, and operated by any convenient device.

LEMUEL SCUDDER FITHIAN.

Witnesses:

J. RUSSELL BARR,
WM. C. HARPER.